Please enter 2/18/05

AMENDMENTS TO THE CLAIMS:

This listing will replace all prior versions and listings of claims in the application as follows:

1. (Currently Amended) A phase compensation circuit, comprising:

a delay circuit receiving a composite input signal that exhibits a variable phase error, the delay circuit providing a plurality of selectable discrete delays; and

a control circuit coupled to the delay circuit, the control circuit receiving a control signal whose value corresponds to the phase error associated with the composite input signal, the control circuit selecting one of the plurality of selectable discrete delays responsive to the control signal, wherein the selected delay is utilized to delay the composite input signal to provide a phase compensated composite output signal, and wherein the composite input signal is provided by a detector of an FM receiver whose input is coupled to an adaptive reception system (ARS) that receives a plurality of transmitted signals each through one of a plurality of antennas and provides a composite received signal to the input of the FM receiver, where the phase compensated composite output signal is provided to the ARS to phase align the plurality of transmitted signals received through the plurality of antennas~~.~~; and

an output buffer, the output buffer receiving and amplifying the delayed composite input signal.

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Original) A phase compensation circuit, comprising:

a delay circuit receiving a composite input signal that exhibits a variable phase error, the delay circuit providing a plurality of selectable discrete delays;

a control circuit coupled to the delay circuit, the control circuit receiving a control signal whose value corresponds to the phase error associated with the composite input signal, the control circuit selecting one of the plurality of selectable discrete delays responsive to the control signal, wherein the selected delay is utilized to delay the composite input signal; and

an output buffer, the output buffer receiving and amplifying the delayed composite input signal to provide a phase compensated composite output signal.

8. (Original) The circuit of claim 7, wherein at least one of the plurality of selectable discrete delays also amplifies the composite input signal as a function of the control signal.

9. (Original) The circuit of claim 7, wherein the composite input signal is a frequency modulation (FM) composite input signal.

10. (Original) The circuit of claim 9, wherein the composite input signal is provided by a detector of an FM receiver and the phase error associated with the composite input signal is introduced when the bandwidth of an intermediate frequency (IF) filter of the FM receiver is dynamically varied.

11. (Original) The circuit of claim 7, wherein the composite input signal is provided by a detector of an FM receiver whose input is coupled to an adaptive reception system (ARS) that receives a plurality of transmitted signals each through one of a plurality of antennas and provides a composite received signal to the input of the FM receiver, and wherein the phase compensated composite output signal is provided to the ARS to phase align the plurality of transmitted signals received through the plurality of antennas.

12. (Currently Amended) A method for providing phase compensation of a signal, comprising the steps of:

providing a delay circuit for receiving a composite input signal that exhibits a variable phase error, the delay circuit providing a plurality of selectable discrete delays; ~~and~~

providing a control circuit coupled to the delay circuit, the control circuit receiving a control signal whose value corresponds to the phase error associated with the composite input signal, the control circuit selecting one of the plurality of selectable discrete delays responsive to the control signal, wherein the selected delay is utilized to delay the composite input signal to provide a phase compensated composite output signal, and wherein the composite input signal is provided by a detector of an FM receiver whose input is coupled to an adaptive reception system (ARS) that receives a plurality of transmitted signals each through one of a plurality of antennas and provides a composite received signal to the input of the FM receiver, where the phase compensated composite output signal is provided to the ARS to phase align the plurality of transmitted signals received through the plurality of antennas~~.~~ , and

providing an output buffer, the output buffer receiving and amplifying the delayed composite input signal.

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Currently Amended) A frequency modulation (FM) reception system, comprising:

a phase compensation circuit, including:

a delay circuit receiving an FM composite input signal that exhibits a variable phase error, the delay circuit providing a plurality of selectable discrete delays; ~~and~~

a control circuit coupled to the delay circuit, the control circuit receiving a control signal whose value corresponds to the phase error associated with the composite input signal, the control circuit selecting one of the plurality of selectable discrete delays responsive to the control signal, wherein the selected delay is utilized to delay the composite input signal to provide a phase compensated composite output signal;

an FM receiver coupled to and providing the composite input signal to the delay circuit of the phase compensation circuit; ~~and~~

an adaptive reception system (ARS) that receives a plurality of transmitted signals each through one of a plurality of antennas and provides a composite received signal to an input of the FM receiver, and wherein the phase compensated composite output signal is provided to the ARS to phase align the plurality of transmitted signals received through the plurality of antennas~~.~~ and

an output buffer, the output buffer receiving and amplifying the delayed composite input signal.

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (New) A phase compensation circuit, comprising:

a delay circuit receiving a composite input signal that exhibits a variable phase error, the delay circuit providing a plurality of selectable discrete delays; and

a control circuit coupled to the delay circuit, the control circuit receiving a control signal whose value corresponds to the phase error associated with the composite input signal, the control circuit selecting one of the plurality of selectable discrete delays responsive to the control signal, wherein the selected delay is utilized to delay the composite input signal to provide a phase compensated composite output signal, and wherein the composite input signal is provided by a detector of an FM receiver whose input is coupled to an adaptive reception system (ARS) that receives a plurality of transmitted signals each

through one of a plurality of antennas and provides a composite received signal to the input of the FM receiver, where the phase compensated composite output signal is provided to the ARS to phase align the plurality of transmitted signals received through the plurality of antennas; and

wherein at least one of the plurality of selectable discrete delays also amplifies the composite input signal as a function of the control signal.

23. (New) A phase compensation circuit, comprising:

a delay circuit receiving a composite input signal that exhibits a variable phase error, the delay circuit providing a plurality of selectable discrete delays; and

a control circuit coupled to the delay circuit, the control circuit receiving a control signal whose value corresponds to the phase error associated with the composite input signal, the control circuit selecting one of the plurality of selectable discrete delays responsive to the control signal, wherein the selected delay is utilized to delay the composite input signal to provide a phase compensated composite output signal, and wherein the composite input signal is provided by a detector of an FM receiver whose input is coupled to an adaptive reception system (ARS) that receives a plurality of transmitted signals each through one of a plurality of antennas and provides a composite received signal to the input of the FM receiver, where the phase compensated composite output signal is provided to the ARS to phase align the plurality of transmitted signals received through the plurality of antennas, wherein the composite input signal is a frequency modulation (FM) composite input signal provided by a detector of an FM receiver and the phase error associated with the composite input signal is introduced when the bandwidth of an intermediate frequency (IF) filter of the FM receiver is dynamically varied.

24. (New) A method for providing phase compensation of a signal, comprising the steps of:

providing a delay circuit for receiving a composite input signal that exhibits a variable phase error, the delay circuit providing a plurality of selectable discrete delays; and

providing a control circuit coupled to the delay circuit, the control circuit receiving a control signal whose value corresponds to the phase error associated with the composite input signal, the control circuit selecting one of the plurality of selectable discrete delays responsive to the control signal, wherein the selected delay is utilized to delay the composite input signal to provide a phase compensated composite output signal, and wherein the composite input signal is provided by a detector of an FM receiver whose input is coupled to an adaptive reception system (ARS) that receives a plurality of transmitted signals each through one of a plurality of antennas and provides a composite received signal to the input of the FM receiver, where the phase compensated composite output signal is provided to the ARS to phase align the plurality of transmitted signals received through the plurality of antennas, wherein at least one of the plurality of selectable discrete delays also amplifies the composite input signal as a function of the control signal.

25. (New) A method for providing phase compensation of a signal, comprising the steps of:

providing a delay circuit for receiving a composite input signal that exhibits a variable phase error, the delay circuit providing a plurality of selectable discrete delays; and

providing a control circuit coupled to the delay circuit, the control circuit receiving a control signal whose value corresponds to the phase error associated with the composite input signal, the control circuit selecting one of the plurality of selectable discrete delays responsive to the control signal, wherein the selected delay is utilized to delay the composite input signal to provide a phase compensated composite output signal, and wherein the composite input signal is

provided by a detector of an FM receiver whose input is coupled to an adaptive reception system (ARS) that receives a plurality of transmitted signals each through one of a plurality of antennas and provides a composite received signal to the input of the FM receiver, where the phase compensated composite output signal is provided to the ARS to phase align the plurality of transmitted signals received through the plurality of antennas, wherein the composite input signal is a frequency modulation (FM) composite input signal provided by a detector of an FM receiver and the phase error associated with the composite input signal is introduced when the bandwidth of an intermediate frequency (IF) filter of the FM receiver is dynamically varied.

26. (New) A frequency modulation (FM) reception system, comprising:

a phase compensation circuit, including:

a delay circuit receiving an FM composite input signal that exhibits a variable phase error, the delay circuit providing a plurality of selectable discrete delays; and

a control circuit coupled to the delay circuit, the control circuit receiving a control signal whose value corresponds to the phase error associated with the composite input signal, the control circuit selecting one of the plurality of selectable discrete delays responsive to the control signal, wherein the selected delay is utilized to delay the composite input signal to provide a phase compensated composite output signal;

an FM receiver coupled to and providing the composite input signal to the delay circuit of the phase compensation circuit; and

an adaptive reception system (ARS) that receives a plurality of transmitted signals each through one of a plurality of antennas and provides a composite received signal to an input of the FM receiver, and wherein the phase compensated composite output signal is provided to the ARS to phase align the plurality of transmitted signals received through the plurality of antennas wherein at lest one of the plurality of selectable discrete delays also amplifies the

composite input signal as a function of the control signal.

27. (New) A frequency modulation (FM) reception system, comprising:

a phase compensation circuit, including:

a delay circuit receiving an FM composite input signal that exhibits a variable phase error, the delay circuit providing a plurality of selectable discrete delays; and

a control circuit coupled to the delay circuit, the control circuit receiving a control signal whose value corresponds to the phase error associated with the composite input signal, the control circuit selecting one of the plurality of selectable discrete delays responsive to the control signal, wherein the selected delay is utilized to delay the composite input signal to provide a phase compensated composite output signal;

an FM receiver coupled to and providing the composite input signal to the delay circuit of the phase compensation circuit; and

an adaptive reception system (ARS) that receives a plurality of transmitted signals each through one of a plurality of antennas and provides a composite received signal to an input of the FM receiver, and wherein the phase compensated composite output signal is provided to the ARS to phase align the plurality of transmitted signals received through the plurality of antennas wherein at least one of the plurality of selectable discrete delays also amplifies the composite input signal as a function of the control signal.